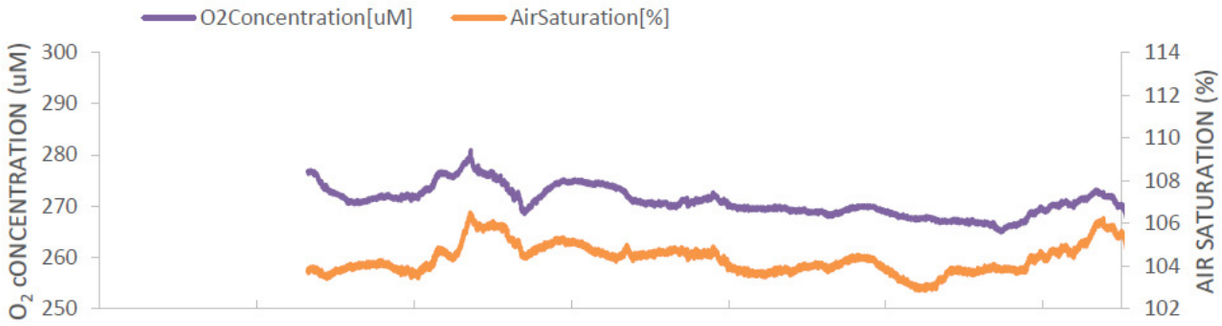

Figure 3. Data collected from the Oxygen Optode 30/06 – 5/07

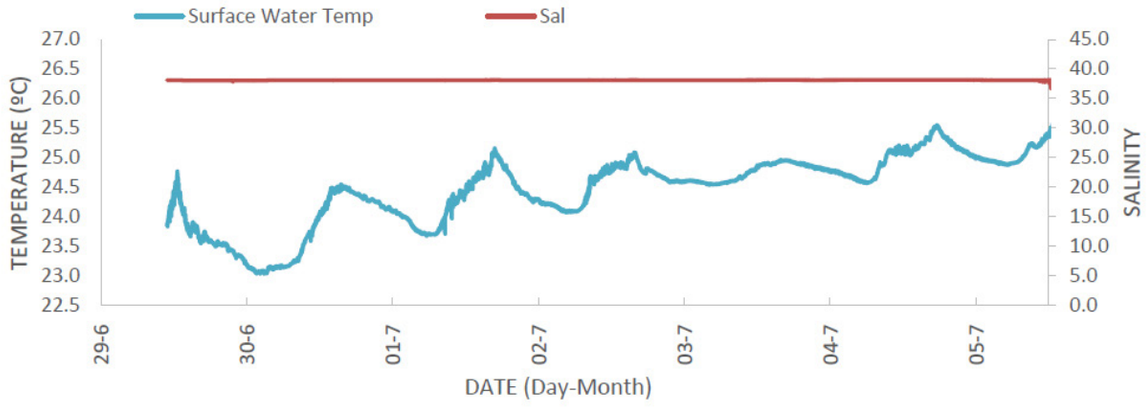

Figure 4. Data collected from the Microcat 29/06 – 5/07

ID40- NOISE AND BIOLOGICAL SOUNDS: ARCTIC SOUNDSCAPES DURING THE 2013 AND 2014 SEASONS

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Statoil deployed three acoustic recorders from fall 2013 to fall 2014 in the Arctic region as part of a broad scientific campaign. One recorder was installed in the Barents Sea southeast of Spitsbergen. Two other recorders were installed in the Greenland Sea north-east of Greenland. All recorders were operating at a duty cycle of 2 minutes on and 30 minutes off, sampling at 39062 Hz and recording in 24 bits. This presentation will report the acoustic analysis done on the data using SONS-DCL, comparing the results between the different locations and putting emphasis on the differences in received sound levels mostly due to ice movement, anthropogenic sources and the presence of cetaceans in the different seasons. For the Greenland Sea data, an overview will be presented of the relationship between received levels and distance of a detected seismic survey. As for the animal presence it was found to be minimal during the summer months, although sperm whales where present all year round and some fin whale calls were received in early summer as well. Bearded seal presence was very seasonal from around April to June both at Spitsbergen and Greenland. Bowhead whale presence at Greenland was especially strong during the winter, with possible humpback presence at Spitsbergen. But no attempt was made to distinguish humpback and bowhead whale calls. At Spitsbergen belugas or narwhals were present; at the Greenland recorders there were fewer dolphin signals, and those found were most likely from white beaked dolphins. A number of unidentified acoustic events were detected as well. These data will be shown here, but are also available for playback from a dedicated website.